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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/401,004	09/21/1999	HENGYUAN LANG	053904-0105	4060

7590 01/03/2006  
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EXAMINER

EPPERSON, JON D

ART UNIT	PAPER NUMBER
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1639

DATE MAILED: 01/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/401,004

Applicant(s)

LANG ET AL.

Examiner

Jon D. Epperson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 09 August 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 41,42,44,46,47 and 49-71 is/are pending in the application.
- 4a) Of the above claim(s) 41,46,47,53,62,64,65,69 and 71 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 42,44,49-52,54-61,63,66-68 and 70 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Status of the Application***

1. The Response filed August 9, 2005 is acknowledged.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior office action.

### ***Status of the Claims***

3. Claims 17-36 and 38-48 were pending (e.g., see 2/12/04 Non-Final Office Action). Applicants canceled claims 1-40, 43, 45 and 48 (e.g., see 7/21/04 Response). In addition, Applicants added claims 49-71 (e.g., see 7/21/04 Response; see also 8/9/05 Response with regard to renumbering claims). Applicants also amended claims 41, 42, 44, 51 and 57 (e.g., see 7/21/04 Response; see also 8/9/05 Response) and renumbered the "second" claim 63 and claims 64-70 as claims 64-71 to compensate for this clerical error. Therefore, claims 41, 42, 44, 46, 47 and 49-71 are currently pending.
4. Claims 41, 46, 47, 53, 62, 64, 65, 69 and 71 are drawn to non-elected species and/or inventions (e.g., see 8/9/05 Response, page 36, last paragraph) and thus these claims remain withdrawn from further consideration by the examiner, 37 CFR 1.142(b), there being no allowable generic claim.

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5. Therefore, claims 42, 44, 49-52, 54-61, 63, 66-68 and 70 are examined on the merits in this action.

### **Withdrawn Objections/Rejections**

6. The objections to the claims are withdrawn in view of Applicants' arguments and/or amendments. The 35 U.S.C. 112, second paragraph rejection is withdrawn in view of Applicants' amendments and/or arguments. The Hideg et al rejection under 35 U.S.C. § 102(b) is withdrawn in view of Applicants' arguments and/or amendments. The Sawlewicz et al. rejection is withdrawn in view of Applicants' amendments and/or arguments. The Barton et al. 35 U.S.C. § 102(b) rejection is withdrawn in part because claim 56, which previously corresponded to claim 39, does not contain a Markush listing readable on -CF<sub>3</sub> (e.g., "C<sub>1</sub> to C<sub>12</sub> substituted alkyl" as in claim 42). All other rejections are maintained and the arguments are addressed below.

### **Outstanding Objections and/or Rejections**

#### ***Claims Rejections - 35 U.S.C. 102***

7. Claims 42, 49 and 50 are rejected under 35 U.S.C. 102(b) as being anticipated by Barton et al (EP 448206) (Date of Patent is 1992) (of record).

For *claims 42, 49 and 50*, Barton et al (see entire document) disclose 5-[2-chloro-6-fluoro-4-(trifluoromethyl)phenoxy]-2-(trifluoromethyl)-1-Benzimidazole-1-acetamide (see Barton et al, abstract; see also attached sheet with registry number 138031-97-7P;

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Table 4, compound 73), which anticipates the claimed invention. This compound reads on the instant claims when R<sup>1</sup>, R<sup>2</sup> and R<sup>4</sup> are hydrogen; R<sup>3</sup> is a protected hydroxyl (i.e., the tri-substituted phenyl ring is the protecting group); R<sup>5</sup> is a substituted C-1 alkyl (i.e., the -CF<sub>3</sub>); R<sup>6</sup> is methylene; R<sup>7</sup> and R<sup>8</sup> are both hydrogen. In addition, Barton et al. disclose that said tri-substituted phenyl ring acts as a protecting group because it protects the hydroxyl from reacting with SOCl<sub>2</sub> (e.g., see Example 18 and reference to compound No. 73). “When the PTO shows a sound basis for believing that the products of the applicant and the prior art are the same, the applicant has the burden of showing that they are not.” *In re Spada*, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990). The Office does not have the facilities to make such a comparison and the burden is on the applicants to establish the difference. See *In re Best*, 562 F.2d 1252, 195 USPQ 430 (CCPA 1977) and *Ex parte Gray*, 10 USPQ 2d 1922 1923 (PTO Bd. Pat. App. & Int.).

### ***Response***

8. Applicant's arguments directed to the above 35 U.S.C. § 102 rejection were fully considered (and are incorporated in their entirety herein by reference) but were not deemed persuasive for the following reasons. Please note that the above rejection has been modified from its original version to more clearly address applicants' newly amended and/or added claims and/or arguments.

Applicants argue, “The rejection does not include any evidence nor has the Examiner presented any cogent scientific reasoning from the teaching of the reference that person having

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ordinary skill in the art would have recognized the phenoxy group as a hydroxyl group protecting group (e.g., see 7/21/04 Response, first full paragraph).

This is not found persuasive for the following reasons:

The Examiner contends that the tri-substituted phenyl group “protects” the hydroxyl from reaction with  $\text{SOCl}_2$  as noted in the newly amended rejection above.

Accordingly, the 35 U.S.C. § 102 rejection cited above is hereby maintained.

### **New Rejections**

#### ***Claims Rejections - 35 U.S.C. 112, first paragraph***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

9. Claims 42, 44, 49-52, 54-61, 63, 66-68 and 70 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed had possession of the claimed invention. This is a new matter rejection.

A. Claims 42, 44, 49 and 56 were amended in the 7/21/04 and/or 8/9/05 Responses to include proviso language (e.g., “... with the proviso that when  $\text{R}^7$  and  $\text{R}^8$  are hydrogen or  $-\text{CH}_2\text{CH}_3$ , substituents  $\text{R}^1$ ,  $\text{R}^2$ ,  $\text{R}^3$  and  $\text{R}^4$  cannot be hydrogen”). However, applicant did not show where support for these amendments could be found. Specifically, any negative limitation or exclusionary proviso must have basis in the original disclosure (e.g., see *In re Johnson*, 558 F.2d 1008, 1019, 195 USPQ 187, 196 (CCPA 1977); see also *Ex parte*

*Grasselli*, 231 USPQ 393 (Bd. App. 1983), *aff'd* mem., 738 F.2d 453 (Fed. Cir. 1984)).

Here, Applicants have failed to indicate where said basis has been positively recited in the disclosure. If applicant believes this rejection is in error, applicant must disclose where in the specification support for this amendment can be found in accordance with MPEP 714.02. Therefore, claims 42, 44, 49, 56 and all-dependent claims represent new matter.

***Claims Rejections - 35 U.S.C. 102***

10. Claims 44 is rejected under 35 U.S.C. 102(b) as being anticipated by Serafin et al. (Serafin, B.; Konopski, L. "Synthesis and reactions of 1,2-disubstituted benzimidazoles" *Polish Journal of Chemistry* 1978, 52(1), 51-62).

For *claims 44*, Serafin et al. (see entire document) disclose 2-(aminocarbonyl)-1H-Benzimidazole-1-propanamide (see page 52, compound 11; RN 66655-38-7), which anticipates the claimed invention. This compound reads on the instant claims when R<sup>1</sup>-R<sup>4</sup> are hydrogen; R<sup>5</sup> is C(=O)-NH<sub>2</sub> (falls within the scope of C<sub>1</sub> to C<sub>12</sub> substituted acyl wherein the substitution is an amino group; see also specification page 23, paragraph 1, "The term "C<sub>1</sub> to C<sub>12</sub> substituted acyl" denotes the acyl groups substituted by ... amino"); R<sup>6</sup> is -CH<sub>2</sub>CH<sub>2</sub>- (falls within the scope of DWE wherein W is absent and D and E = CH<sub>2</sub>); R<sup>7</sup> and R<sup>8</sup> are hydrogen.

*Claim Rejections - 35 USC § 103*

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

13. Claim 44 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hideg et al. (Hideg, K.; Hankovszky, H.O. "Benzazoles. III. Alkylation of benzimidazoles" Acta Chirurgica Academiae Scientiarum Hungaricae (1966), 49(3), 303-10) (of record).

For *claim 44*, Hideg et al. (see entire document) discloses N,N-diethyl-2-phenyl-1-benzimidazoleacetamide (see Hideg et al., abstract; see also attached sheet with registry number 14521-64-3P; see also Table III, 25), which anticipates claim 1. This compound reads on the instant claims when R<sup>1</sup>-R<sup>4</sup> are hydrogen; R<sup>5</sup> is phenyl; R<sup>6</sup> is methylene; R<sup>7</sup> and R<sup>8</sup> are ethyl groups (i.e., falls within the scope of C<sup>1</sup> to C<sup>12</sup> alkyl).



The prior art teachings of Hideg et al. differ from the claimed invention as follows:

For *claim 44*, Hideg et al. are deficient in that they do not specifically teach the use of  $-\text{CH}_2\text{CH}_2\text{CH}_3$  for  $\text{R}^7$  or  $\text{R}^8$  (i.e., a “C3 alkyl”). Hideg et al. only teach the use of  $-\text{CH}_2-\text{CH}_3$  (i.e., a “C2 alkyl”) for both  $\text{R}^7$  and  $\text{R}^8$  and hence fall within the scope of Applicant’s proviso language that excludes  $\text{R}^1$ ,  $\text{R}^2$ ,  $\text{R}^3$  and  $\text{R}^4$  as hydrogen when  $\text{R}^7$  and  $\text{R}^8$  are both  $-\text{CH}_2\text{CH}_3$ .

However, compounds which homologs (compounds differing regularly by the successive addition of the same chemical group, e.g., by  $-\text{CH}_2-$  groups) are generally of sufficiently close structural similarity that there is a presumed expectation that such compounds possess similar properties. *In re Wilder*, 563 F.2d 457, 195 USPQ 426 (CCPA 1977). See also *In re May*, 574 F.2d 1082, 197 USPQ 601 (CCPA 1978) (stereoisomers prima facie obvious). Homologs which are far removed from adjacent homologs may not be expected to have similar properties. *In re Mills*, 281 F.2d 218, 126 USPQ 513 (CCPA 1960) (prior art disclosure of  $\text{C}_8$  to  $\text{C}_{12}$  alkyl sulfates was not sufficient to render prima facie obvious claimed  $\text{C}_1$  alkyl sulfate). However, this is not the case here. A  $-\text{CH}_2\text{CH}_2\text{CH}_3$  group is not “far removed” from a  $-\text{CH}_2\text{CH}_3$  group since the groups differ by only one  $-\text{CH}_2-$  group. Thus, a compound possessing a  $-\text{CH}_2\text{CH}_2\text{CH}_3$  group at either  $\text{R}^7$  or  $\text{R}^8$  would be prima facie obvious to one of ordinary skill in the art abased on the presumption that these compounds would possess similar properties to the disclosed  $-\text{CH}_2\text{CH}_3$  groups.

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### ***Conclusion***

Applicant's amendment necessitated any new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

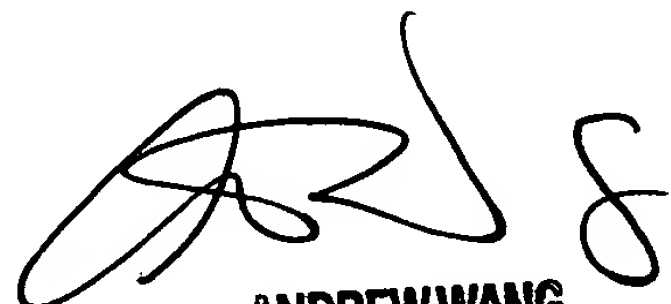
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jon D Epperson whose telephone number is (571) 272-0808. The examiner can normally be reached Monday-Friday from 9:00 to 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Wang can be reached on (571) 272-0811. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-1600.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jon D. Epperson, Ph.D.  
December 18, 2005



**ANDREW WANG**  
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